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PERIPHERAL PARKING

OPPORTUNITIES IN THE SOUTH OF MARKET AREA

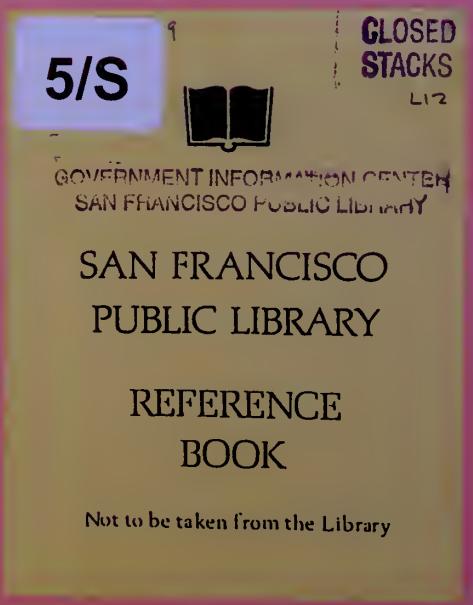
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A BACKGROUND PAPER FOR THE DOWNTOWN PLAN

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FRANCISCO DEPARTMENT OF CITY PLANNING • DECEMBER 1982







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PERIPHERAL PARKING OPPORTUNITIES IN THE SOUTH OF MARKET AREA

DECEMBER 1982

A Background Paper for the Downtown Plan

SAN FRANCISCO DEPARTMENT OF CITY PLANNING

Dean Macris, Director

George Williams, Assistant Director

Robin Jones, Programs Division Chief

Glenn Erikson, Downtown Plan Supervisor

Richard Gamble, Parking Study author

Graphics: Clarence Lee, Fred Stuprich,
Francis Lawsing, Richard Gamble

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PERIPHERAL PARKING OPPORTUNITIES IN THE SOUTH OF MARKET AREA

Introduction

The boom in office construction in San Francisco's downtown area has fostered a number of controversies, not the least of which is where to park the cars of those commuters and visitors who require automotive transportation.

The futility of accommodating more automobiles on downtown streets is abundantly clear. A better way to keep traffic moving is to reduce the number of vehicles within the area by intercepting them at the periphery and conveying the passengers on public transit. To a large extent such a system has long been in effect. Commuters parked in outlying neighborhoods and rode Muni buses into downtown. Close in neighborhoods received the brunt of this practice and sought relief, thus Telegraph, Nob and Russian Hills and Pacific Heights obtained preferential parking controls to ban all day parking for nonresidents.

The city has been working toward a comprehensive solution to this problem, to create a system of peripheral parking facilities. This study details the resources which can be developed for that purpose in the South of Market area.

Background

San Francisco has historically maintained a policy of relying primarily on public transit to give access to its downtown. While the city has received wide acclaim for its pioneering in the creation of a publically owned system of downtown parking garages, and built the nation's first underground garage in Union Square, this city's commitment of funds to create and maintain transit systems (Muni since 1912 and more recently BART) is enormous in comparison.

The Transportation Element of the Comprehensive Plan (1972) first articulated the policy of confining short term parking to belts immediately surrounding the downtown core.

Rewards to the Transportation Element of the Master Plan Regarding Parking, adopted by the Planning Commission in 1977 developed a more comprehensive parking strategy for downtown auto trips. The strategy is summarized in the following three policies from the Downtown Plan section of the Transportation Element:

Policy 1: Encourage short-term use of existing parking facilities within and adjacent to the downtown core by converting all day commuter parking to short-term parking in areas of high demand or to car/van pool parking where short-term parking demands are low.

Policy 2: Provide needed additional short-term parking facilities in peripheral locations around but not within the downtown core, adjacent to major thoroughfares.

Policy 3: Discourage the addition of new long-term parking spaces in and around downtown, limit the amount of new spaces to that which cannot reasonably be accommodated by transit and locate long-term parking facilities in areas peripheral to the downtown commercial district.

In addition to locating parking for downtown commuters in the South of Market; as called for by the Transportation Element, there will continue to be a demand for parking generated by new South of Market development outside the downtown. This area is less well served by transit than the downtown. Much of the development is occurring through conversion of existing structures and site constraints make it difficult to provide adequate parking on site.

The Northeastern Waterfront Plan (1979) specified locations for intercept parking. Guiding Downtown Development (1981), the Planning Department's initial proposal in the current restructuring of downtown zoning regulations, expanded on the concept by identifying a number of sites in South of Market which could accommodate parking structures.

Study Content

The focus of this study has been to investigate in depth the potential of sites identified in "Guiding Downtown Development." Most of the sites are beneath or adjoining freeway structures, the others are underdeveloped sites nearby.

Emphasis has been given to development of a system of public garages. However, whether the garages are in public or private ownership is irrelevant to the study's goal.

With public ownership, the city would be able to utilize its bonding capacity and powers of eminent domain. Moreover, the tax free status of public property means lower operating costs and parking rates. Some of the sites could be developed under private auspices, perhaps as community garages to satisfy the parking requirements of new developments in the South of Market area.

The intent of the study is to guide public actions toward creation of the parking system envisioned. Therefore it does not dwell on how to encourage small scale private developments other than to point out such opportunities and to go on record favoring them.

Investigation of Sites

All under-freeway sites (except the Embarcadero) were examined to determine where garage structures might be located. Construction plans were consulted to determine the location and spacing of columns and vertical clearances. Many sites proved undevelopable for a public size garage because of obstructions or insufficient space. Preliminary designs were developed for each site to determine how many cars could be accommodated. Standards for self-park garages were utilized because high insurance costs make valet parking uneconomic for public garages. Details such as location of entrances, cashier facilities, etc. were generally left for later design stages.

Design Considerations

Intercept parking garages for commuters must by their very nature, be large. The function of such garages is to act as sponges; to get the maximum number of commuter cars off the street system as quickly as possible. A series of small garages would have the opposite effect.

The aesthetic impact of massive garages could be disastrous in some settings, especially in areas where building scale is small. Fortunately, most of the areas under consideration are not of this character. Nevertheless, it may be desirable to reduce the capacity of some of the proposed facilities in order to introduce mixed uses (on upper floors as well as ground level) or to make the structures more "sculptural" and less massive. In many cases, however, site dimensions will accommodate only one configuration of parking bays, which may limit the options for aesthetic treatments. Each project will have to be judged on its own merits and will be subject to design review by the Planning Commission and for public projects, the Art Commission.

The Urban Design Plan urges the inclusion of stores at ground level of garages in commercial areas to maintain continuity of pedestrian activity and avoid sterility. The Sutter Stockton garage is an excellent example. Because of the nature of peripheral parking locations few of these sites are desirable for shops. Commercial space should be considered on important street frontages if it can be accommodated without detriment to the function of the parking structure.

Feasibility Studies

Consideration of project feasibility requires input of current factors such as property and construction costs and prevailing parking rates. Such costs are subject to fluctuation, particularly in today's economy, and would be meaningless if projected to forecast overall program costs. Staff is investigating, together with the Parking Authority and

Real Estate Department, the probable costs and revenues of the most promising projects to determine feasibility and subsidy requirements, if needed. A financing plan will be prepared for each project before it is submitted to the Parking Authority and Board of Supervisors.

The Study Area

The South of Market area, by virtue of underutilization of private land, the presence of the freeway network and the existence of some large sites in state ownership beneath and adjoining the freeway structures, offers significant potential for development of a peripheral parking system. Some of the sites are but a short walk from the office core and others are convenient to existing Muni routes serving downtown. Others, which could accommodate significant numbers of vehicles, are not currently served by direct Muni access to downtown and will require new or rerouted service to be effective parts of a parking program. Other criteria, such as the potential for evening and weekend use or development cost, will also influence determinations regarding site priority.

Transbay Terminal Area

According to the Transportation Element of the Master Plan, this area is not suitable for long term parking but it could be considered for short term use. The higher revenue producing capacity of short term garages could help meet shortfalls in the long term garages, hence this study is considering all the parking resources in the area.

The ramps and bus storage structures which connect the terminal to the Bay bridge offer limited potential for parking structures because the columns are massive and closely spaced. The adjoining freeway ramps, however, have large spans, typically 60 to 90 ft., which leave spaces of sufficient breadth to accommodate parking.

Four sites were studied to determine their suitability for garage structures: (a) the block bounded by Howard, Beale, Folsom and Main (hereafter called the Howard-Beale site), and three partial blocks between Clementina and Folsom Streets; (b) from Ecker Alley to First, (c) First to Fremont and (d) Fremont to Beale. The last was eliminated because much of the site is occupied by a large earth berm for a freeway ramp. The other two sites (b & c) have limited potential due to insufficient clearance between the foundation caps and overhead structures. The number of additional parking spaces to be gained, is too small (around 200) to justify a public project. Such small garages however, might be excellent for private enterprise or corporate use. Moreover, these sites might be more efficiently used as valet parking where the yield in number of spaces would be considerably greater than in self-park public garages.

(1a) Howard-Beale: This site is complicated by the curving alignment and multiple levels of the freeway ramps. The clearances between footing caps and overhead structures will accommodate three levels of parking over the entire site. The southerly 160 ft., along Folsom Street, would not be utilized due to probable reconstruction associated with Embarcadero Freeway removal.

Two parcels in private ownership fronting on Main Street are included in the site. One is a former freight siding owned by the Southern Pacific Railroad. SP retained surface rights when it sold air rights to Caltrans. The other is a triangular shape approximately 140 X 100 ft. and abuts the SP parcel. It contains a two story office building and parking lot. While the parcel is small, it has a 320 ft. height limit which could make it uneconomic to use for a three story parking structure. Hence two designs were developed for the site, including and excluding this parcel. The yield in parking spaces is 283 spaces per deck including this parcel and 219 spaces excluding it.

While the Howard-Beale site is attractive because of its proximity to the office core, this factor may make the land too valuable to be devoted to parking. Nevertheless, the potential of an 650-850 car garage at this location deserves careful economic analysis.

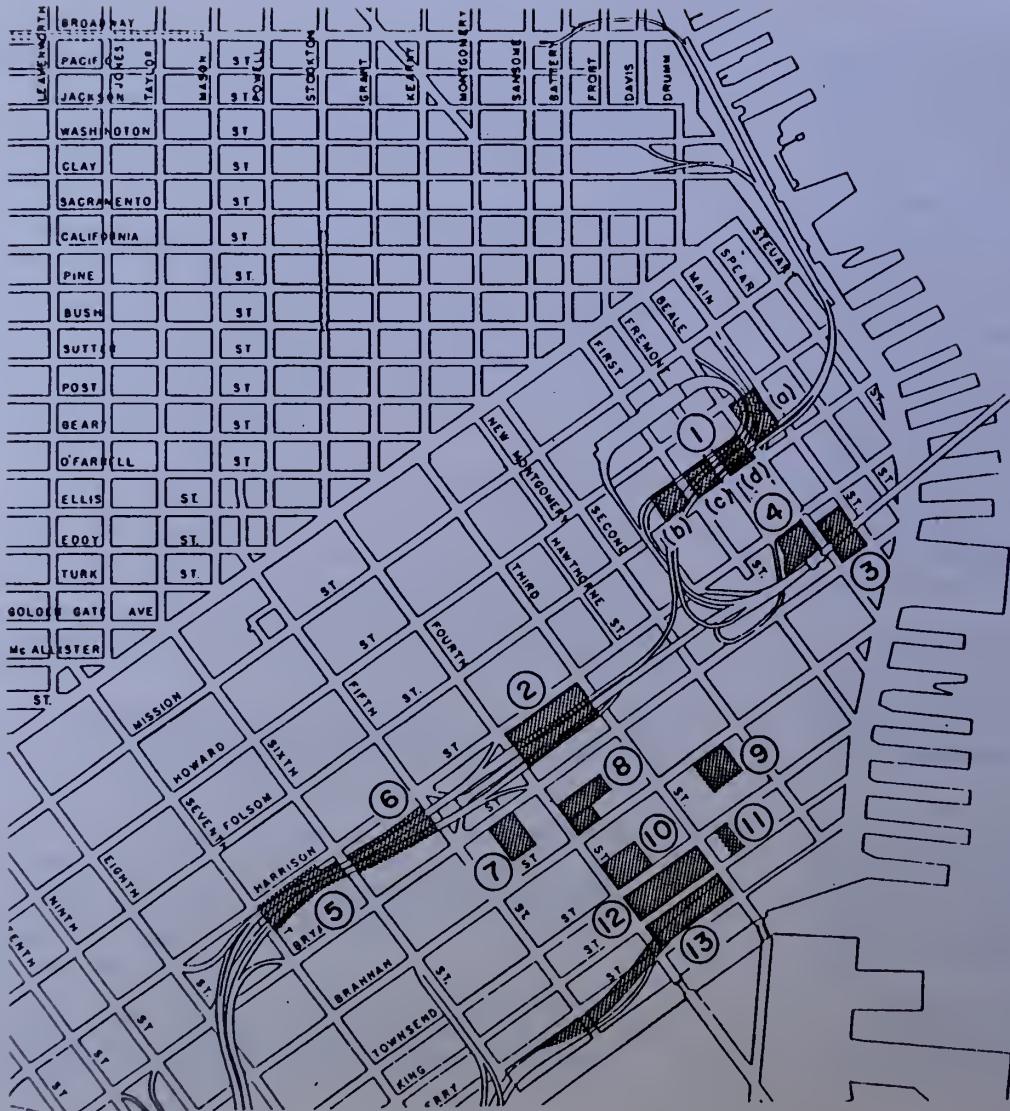


FIGURE I:
SITE LOCATION MAP

Bay Bridge Corridor

This is the principal spine of underutilized space close to downtown. Lying four and one-half blocks (1/2 mile) south of Market Street it requires a bus shuttle system to give ready access to the core.

Some locations along this spine already have frequent Muni service, some benefit by having several Muni lines. Particularly favored are Second, Third and Fourth Streets with a collective total of five lines. East of Second, the Gateway Express (80-X), which runs on Beale and Main Streets (weekday rush hours only) and the Embarcadero (#32, daytime only) might be adequate for daytime office workers. However, they would not encourage evening or weekend use, an important factor in making a garage economically sound.

West of Fourth Street, Muni service to the downtown is limited to the #25 San Bruno line which runs on Fifth Street and southerly on Harrison and Bryant Streets. Routes on 8th and 9th Streets serve the Civic Center and Polk Gulch. It seems evident that sites along the spine beyond Fourth Street will not be convenient to financial district users. However, future development in the Civic Center and "Middle Market" and other subareas might create a demand to utilize those sites.

Along the spine are many sites which are so fragmented by structures, low clearances and freeway ramps as to be unusable for public garages. Small garages for individual businesses or buildings can best utilize these sites.

The sites which have public potential are not limited to Caltrans property. Several abutting sites can also be developed, either combined with or independent of Caltrans sites. The sites along this spine (#2-6 on the Site Location Map) are shown in greater detail following the text. Descriptions of each follow:

(2) Third-Fourth Streets: The Bridge approach and flanking freeway structures are supported upon rows of columns 67'-11" on center, a dimension ideally suited to 9 degree

parking on a 2 way aisle. Clearances will barely permit three levels at the Fourth Street end and up to six levels at Third Street. However, four levels appears to be the maximum practical. 1,000-1,100 cars could be readily accommodated depending on cashier and egress space needs.

Adjoining the site, from Perry to Harrison Streets is a 1/3 block with minimal development, mostly one story buildings, with only five ownerships. The site measures 160 X 825 ft. and is comparable to the 5th and Mission garage site. Height limits (40 ft.) prevent development of more than six decks, including basement. The capacity is approximately 2,500 cars.

Cal-Trans officials have indicated that the Third-Fourth Streets site was contemplated for bus storage in a plan for ultimate development of the Trans Bay Terminal done several years ago. Cal-Trans found the site could accommodate 122 buses. Such use would preclude development of parking above due to bus maneuvering requirements. In response, this study has developed a design for the adjoining Perry-Harrison site which accommodates 150 buses at basement level and five decks for cars above with 420 spaces per deck, maximum.

These sites are served by Muni lines #15, 30, 30X, 17 and 76. They have the added advantage of proximity to Moscone Center (one block north) which could generate substantial evening and weekend patronage. While the two sites could be developed separately, economies of operation would result with single management.

(3) Main-Beale: Cal-Trans has a maintenance station occupying a 340 X 275 ft. site beneath the Bay Bridge, 200 ft. south of Harrison Street. The site would accommodate approximately 310 spaces per deck in a ramp parking scheme. The 275 ft. dimension lends itself to a layout of three 90 ft. bays with 2 aisles of angle parking per bay. One bay would be ramped, the others level.

The 40-ft. height limit would normally permit a total of six decks and a capacity of 1,800 cars. However, a provision of the Rincon Hill plan for rooftop recreational use and the

engineering problems related to water table at this low-lying bayside site could reduce the capacity to four decks and 1,200 cars.

The site is not currently available for lease due to the maintenance facility. Cal-Trans has other such facilities on equally desirable development sites and is considering relocation and consolidation of these operations into more modern facilities on sites better suited to maintenance use. This will take several years to achieve.

Adjoining private property fronting on Harrison Street could add as much as 146 cars per deck. These parcels could be developed with a combination of midrise residential and parking as shown on the Plan. Efficient use of the site would require the parking to occupy Main and Beale Street frontages away from Harrison Street. This development would be independent of the Cal Trans site, or in combination. The parking yield of both alternatives is comparable.

(4) Beale/Fremont/Harrison: Adjoining the Bay Bridge anchorage structure are two large parcels currently used for surface parking separated by a steep slope fringed with a dense growth of trees. While the trees contribute a sense of nature, they do obliterate the one dramatic bay and bridge vista that exists from Rincon Hill. A sensitively designed near or below grade structure could open these vistas and provide a park like setting with promenades in addition to parking.

The site climbs from five ft. above sea level at Beale Street to 60 ft. at Fremont and Harrison Streets. Seven levels of parking could be accommodated in a terraced structure which would step down the hill without obstructing views of the Bay from the top at Fremont Street or views of the anchorage structure from Beale Street. A preliminary design indicates approximately 1,500 spaces could be created.

Underground parking is much more expensive to construct than above ground, often twice as costly per space. It would

be difficult to finance the structure out of parking revenues alone. However, the development of a terraced "park" might justify such an investment.

The site lends itself to mixed use development with a 200 ft. residential tower occupying the Harrison Street frontage. It is possible that the residential use could offset a portion of the increase in garage costs caused by underground construction. The parking capacity would be reduced by the demand generated by site residents, and further reduced by seismic bracing and other safety and structural requirements to support a high rise. More detailed architectural and economic studies would be required to determine the feasibility of a mixed use project.

(5) 6th-7th Streets: The City currently subleases the area behind the Hall of Justice for a surface parking lot. The freeway is not high off the ground in this vicinity and will not allow construction of more than one additional deck. A basement level is probably not practical because the space occupied by footings and pilings would substantially decrease the number of parking spaces which would result.

One benefit derived from double decking would be the expansion eastward across Harriet Street to 6th Street. The upper level would accommodate 90 spaces more than ground level as a result. The space beneath this extension could continue in its current use. The capacity would be 650 cars (existing: 316).

(6) 5th-6th Streets: This area is very marginally utilized for parking at present and will not have significant demand in the near future. Nevertheless it is a resource which may eventually be utilized. The Cal-Trans right of way plus a few adjoining vacant parcels have a capacity of 636 spaces per deck with a 2 level potential. The project would require partial closing of Morris, Oak Grove and Merlin Streets, cross-block alleys.

Summary: The Interstate 80/Bay Bridge spine could provide for an increase of almost 7,000 parking spaces by building a series of parking garages to supplement the spaces which exist at grade. The following table details the existing and potential capacity commencing at 7th Street and proceeding to the Bay.

Table I
Interstate 80 Parking Capacity

Site	Cross Streets	Existing	Potential Increase	Combined Capacity
5	7th-6th	316	334	650
6	6th-5th	400	840	1,240
--	5th-4th	188	--	188
2	4th-3rd	537	3,063	3,600
--	3rd-2nd	400	--	400
--	2nd-1st	99	--	99
4	Fremont-Beale	356	1,135	1,491
3	Beale-Main	171	1,300	1,471
--	Main-Spear	96	--	96
--	Spear-Bay	84	--	84
		<u>2,647</u>	<u>6,672</u>	<u>9,319</u>

Far South of Market

This area lies south of Bryant Street and consists of five sites on "underdeveloped" land and two blocks along Interstate 280.

(7) 641 Bryant Street: The site includes an underused storage yard owned by the city and two one story industrial structures. It measures 275 X 355 ft. Welsh alley extends to the site from 4th and 5th Streets, terminating at both edges. Freelon Alley extends across the rear and opens into 5th Street. These secondary accesses could be advantageous.

The dimensions favor a triple bay layout similar to the Beale/Main/Bryant St. design (also a 275 ft. width). The height limit would allow seven levels, including rooftop and basement. The maximum parking capacity would be about 2,000 spaces. Provision of ground floor commercial space would impair the limited visibility of this midblock location and could substantially reduce the parking capacity, and is therefore not recommended.

(8) Fourth and Brannan Streets: Two sites were identified, one bounded by 4th, Zoe, Walsh and Freelon, the other by 4th, Zoe, Freelon and Brannan. The former site is proposed for a mixed use development with condominium housing (146 units), parking for 298 cars, 18,000 sq.ft. of shops and 57,000 sq.ft. of office space. A conditional use permit was granted for this development on Aug. 12, 1982 and is good for three years. If the site remains undeveloped it could accommodate a parking garage with approximately 1,100 cars. This includes an 80 X 85 ft. parcel at the corner of Zoe and Freelon Streets, not a part of the development proposal.

The second site, Freelon to Brannan Streets, consists of eight parcels, one of which constitutes half its area, and the remainder consists of small commercial/industrial buildings. The remainder would be very difficult to assemble, even with the city's eminent domain powers. The large corner parcel might well be developed in conjunction with the Welsh-Freelon site in a mixed use development. Such a project could be private, or could perhaps be done in partnership with the city. The corner lot could accommodate as many as 500 cars but a mixed use development of both sites would probably result in a maximum of 1,000-1,200 spaces.

(9) 329 Brannan Street: The site consists of two parcels largely devoted to surface parking and a one story building housing PT&T facilities. It measures 275 X 217.5 ft. Such a small site has limited utility for a public garage due to its low capacity, 185 spaces per deck, although the height limit (105 ft.) would allow more levels than is normally considered desirable. Access from Stanford Alley along one side is a plus. Because the site is grossly underutilized and because the PT&T operation would readily be isolated to the basement level with separate entry off Stanford Alley, a public/private partnership arrangement would seem to warrant serious exploration.

(10) 4th and Townsend Streets (N.E. corner): The site measures 275 ft. by 400 ft. and consists of six parcels with two low industrial buildings. One large parcel, currently vacant, has been approved for a seven story office building as of 5/20/82, which will remain valid for three years. Even if this development does not take place there are other factors which would hamper site assembly, the most serious being railroad lines which border and bisect the site and serve blocks farther east. The site has a theoretical capacity of 2,000 cars and could include street level commercial space.

(11) 3rd & Townsend (S.E. corner): The site contains five parcels all but one of which are occupied with commercial and industrial buildings. Half the site is vacant (former warehouse of Bracco Distributing Co.) and would lend itself to a small parking structure with 2 bays of 90 degree parking, one ramped, and could accommodate about 110 cars per level. The remaining parcels would be difficult to assemble. Due to its small size it is not suitable for a public garage.

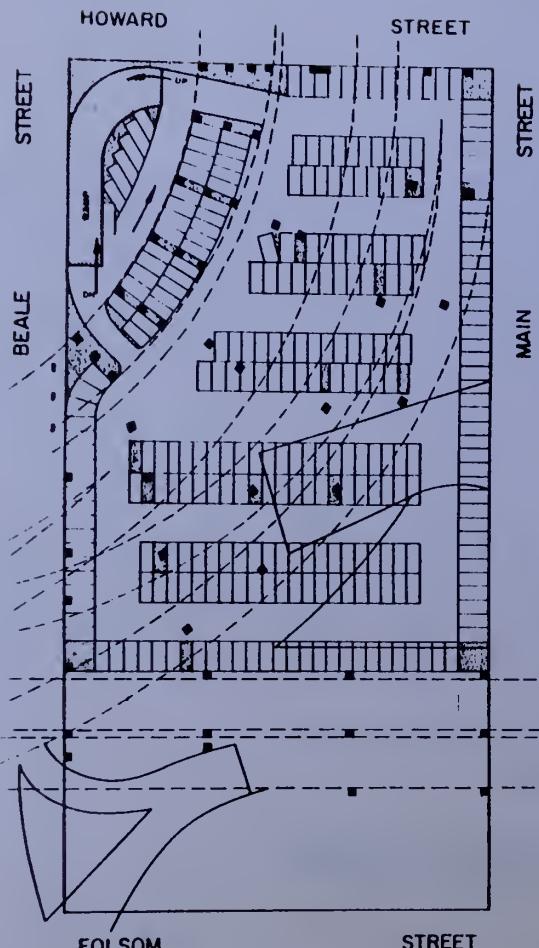
(12) & (13) 3rd-4th & Townsend (former SP Depot) and Interstate 280, 3rd - 4th Streets: The sites, owned by Southern Pacific, are incorporated in the proposed Mission Bay Project which is in preliminary planning. Parking on these sites is likely to be programmed for use by development in the Mission Bay Project. It would be jointly used by the stadium to the East should that project be built.

If the entire Southern Pacific station block were devoted to parking, it could accommodate approximately 600 cars per deck. The maximum parking potential would be close to 5,000 spaces, assuming eight decks. Mixed use would reduce this figure substantially and would divert much of the parking to short-term use.

The Interstate 280 structure unused deck could accommodate two aisles of 90° parking on the 1,700 ft. from the nose of the 4th Street offramp eastward. Together with the unused road area west of the ramp the structure could accommodate 800-1,000 cars. Beneath the structure between Third and Fourth Streets is clearance sufficient for 3 decks with a capacity of 1,000 cars. Without the freeway structure the site could accommodate a 5 or 6 deck garage with a capacity of 3,600 cars. As with the station block, mixed use would significantly reduce the long-term parking capacity.

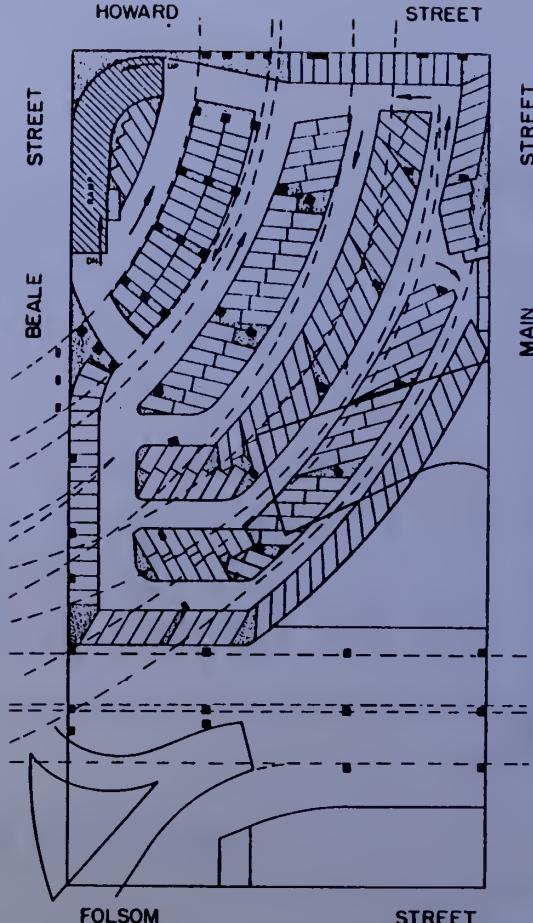
Table II
PARKING CAPACITIES: FAR SOUTH OF MARKET AREA

Site	Location	Capacity
7	641 Bryant	2,000
8	4th & Brannan	1,000-1,200
9	329 Brannan	1,500
10	4th & Townsend	2,000
11	3rd & Townsend	500
12	Old S.F. Depot	2,500-5,000
13	1280 3rd - 4th St.	1,800-36,800
	TOTAL	11,200-15,800



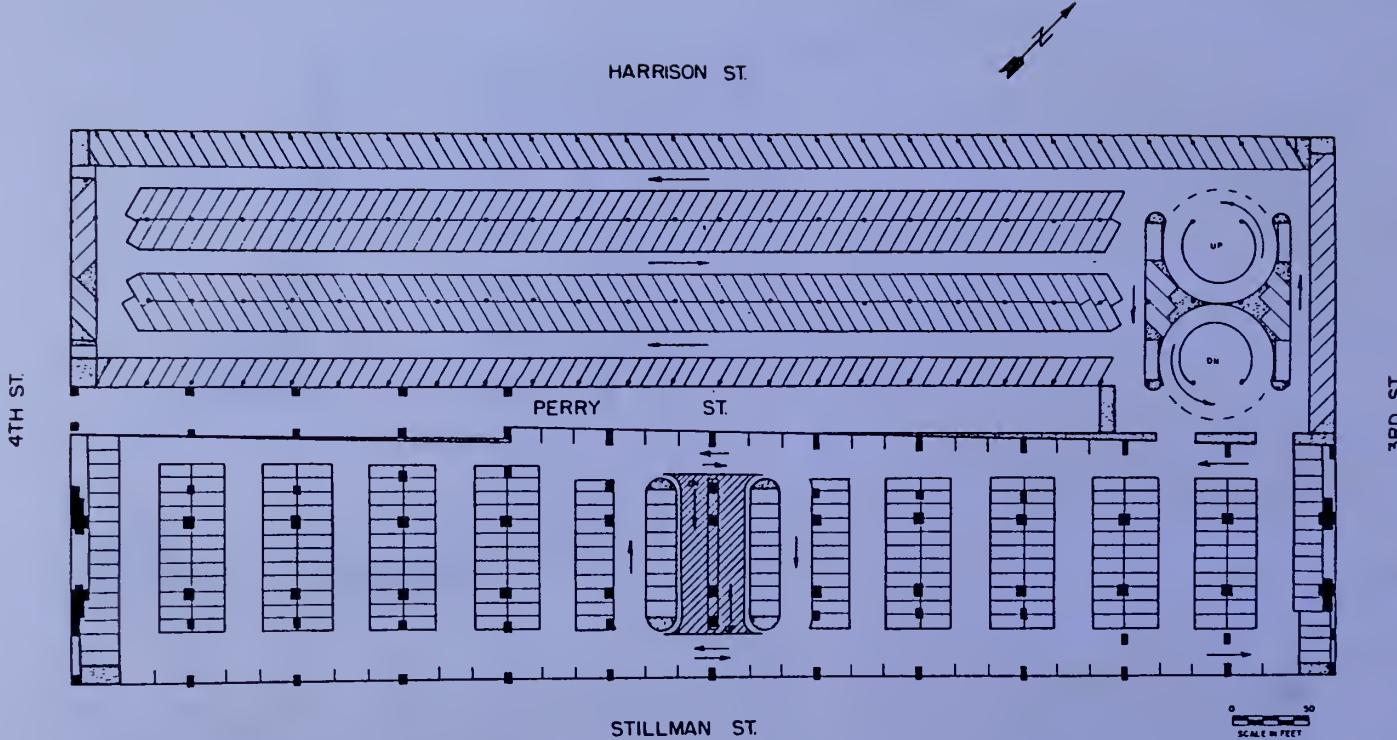
ENTIRE SITE LAYOUT

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SCALE IN FEET

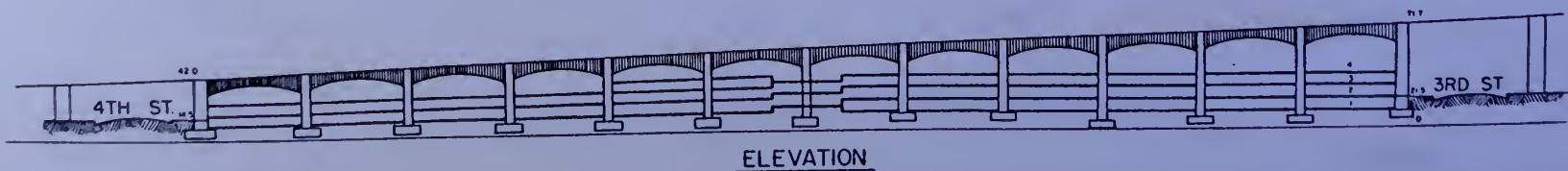


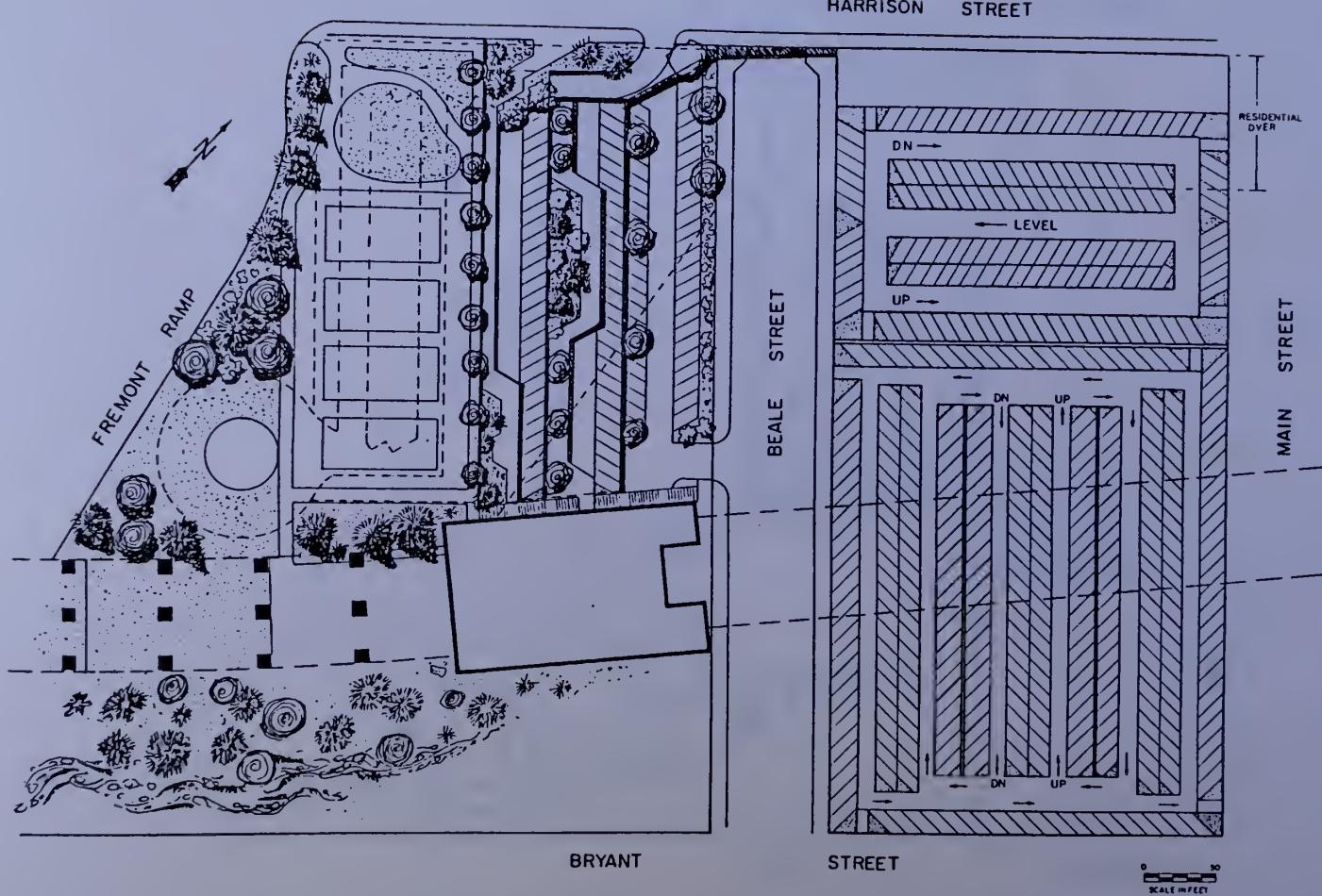
PARTIAL SITE LAYOUT

SOUTH OF MARKET PARKING STUDY SITE NO.1

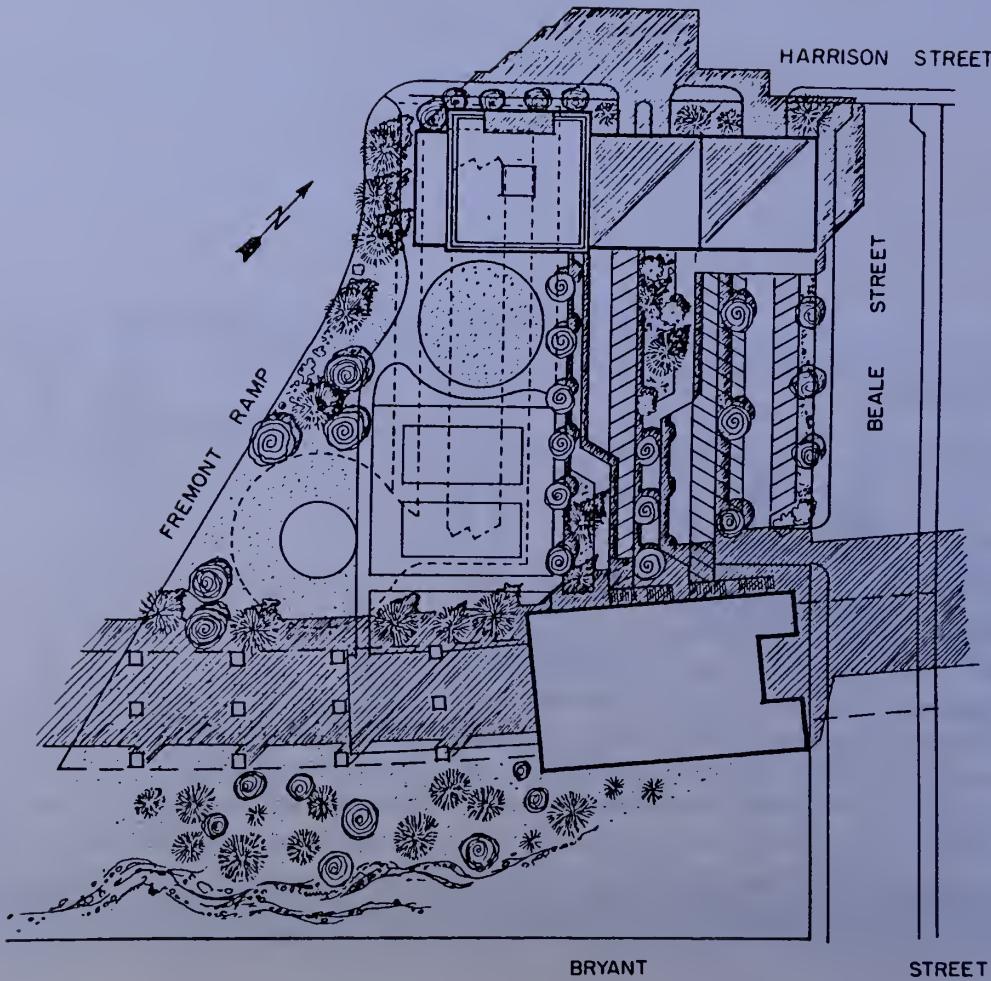


SOUTH OF MARKET PARKING STUDY - SITE 2

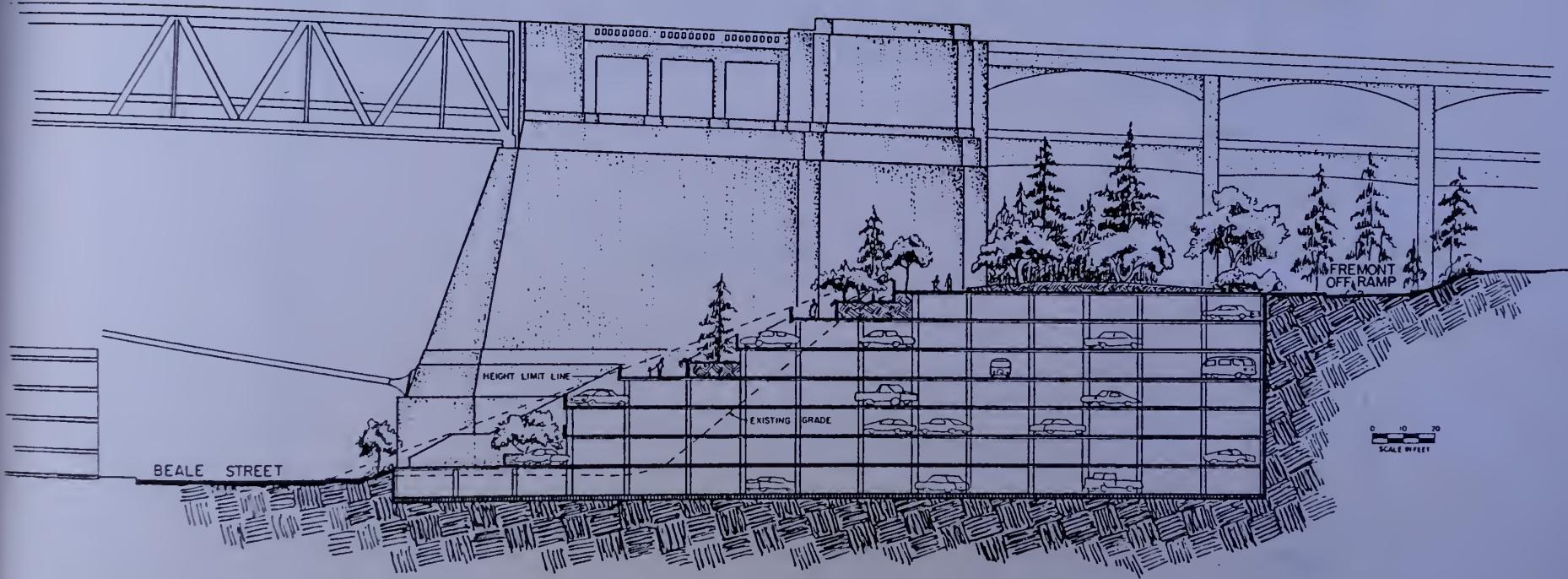




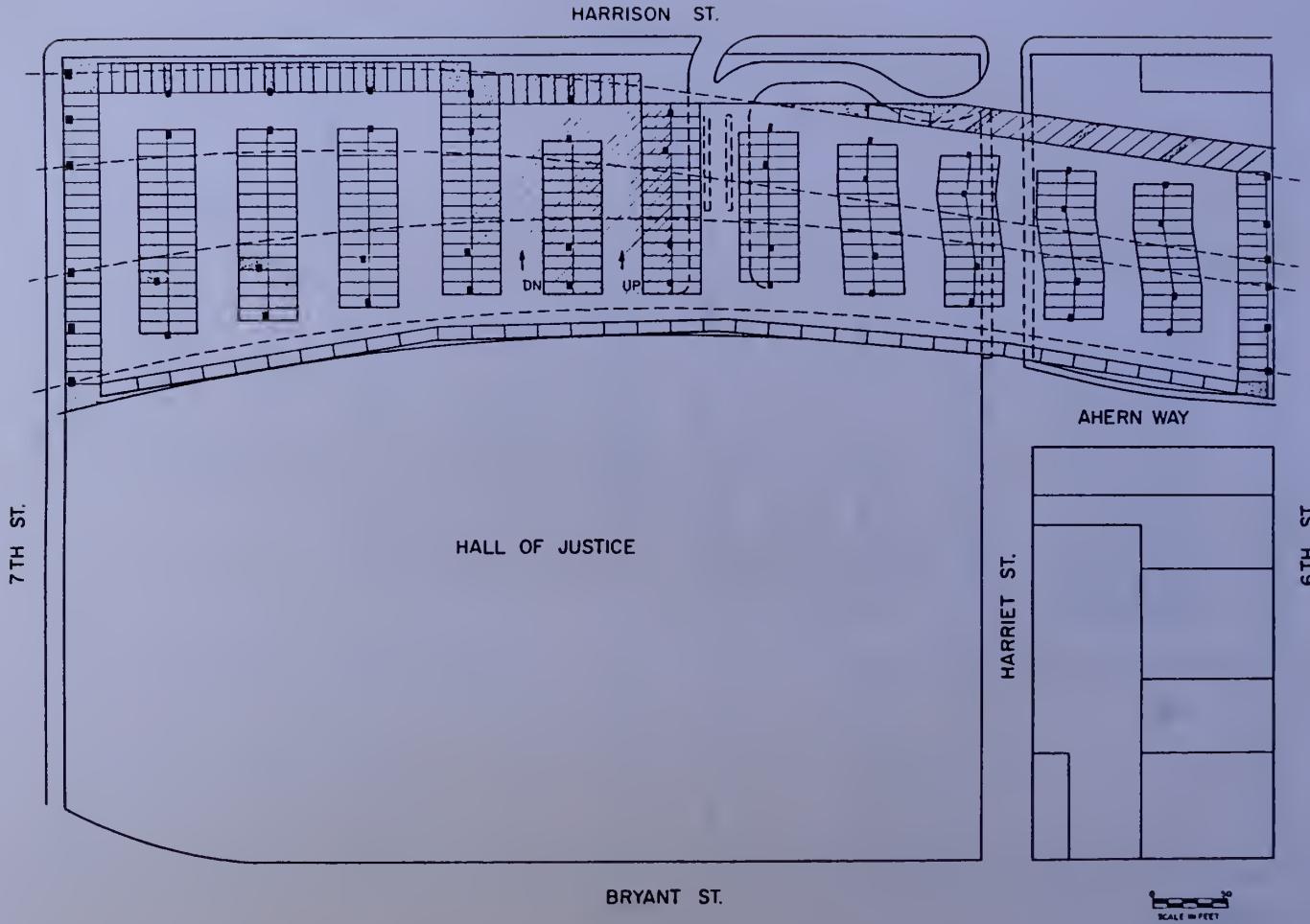
SOUTH OF MARKET PARKING STUDY - SITES 3 & 4



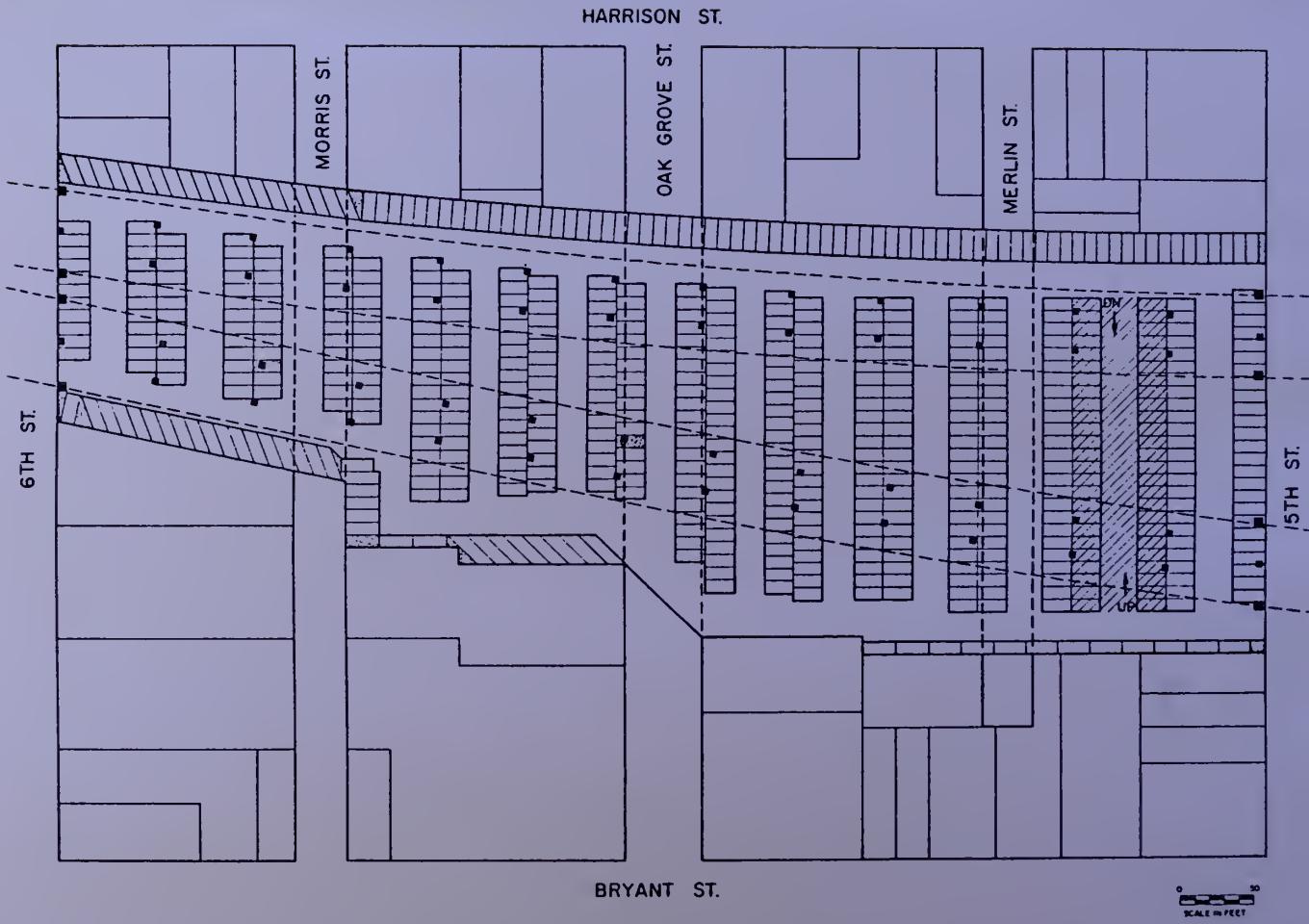
SOUTH OF MARKET PARKING STUDY - SITE 4 WITH MIXED USE



SITE NO.4 SECTION LOOKING SOUTH



SOUTH OF MARKET PARKING STUDY SITE NO. 5



SOUTH OF MARKET PARKING STUDY SITE NO.6



